Appl. No. 09/103,745	Atty. Docket No. 47508.642 US2
Amdt. Dated: November 3, 2004	Client Ref. No. HYZ-642 US2
Donly to Advisory Action of July 1, 2004	

## <u>AMENDMENTS</u>

Please enter the following amendments:

## **Amendments to the claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1. (**previously presented**) A composition for inhibiting specific gene expression with reduced side effects, the composition comprising a modified CpG-containing phosphorothicate oligonucleotide that is complementary to a portion of a genomic region or gene for which inhibition of expression is desired, or to RNA transcribed from such a gene, wherein the modified CpG is selected from the group consisting of alkylphosphonate CpG, 2'-O-substituted CpG, stereospecific phosphorothicate CpG, phosphotriester CpG, phosphoramidate CpG, and 2'-5' CpG.

## 2. (canceled)

- 3. (currently amended) A method for providing a CpG-containing phosphorothioate oligonucleotide with reduced splenomegaly and reduced depletion of platelets to a mammal modulating gene expression in a mammal with reduced side effects comprising administering to the mammal a composition according to claim 1, wherein the oligonucleotide is complementary to a gene that is being expressed in the mammal.
- 4. (currently amended) A method for providing a CpG-containing phosphorothioate oligonucleotide therapeutically treating, with reduced side effects, to an individual with a disease caused by aberrant gene expression, the method comprising administering to an individual having the disease a composition according to claim 1, wherein the oligonucleotide is complementary to a gene that is aberrantly expressed, wherein such aberrant expression causes the disease.
- 5. (**previously presented**) A method for reducing side effects of a CpG-containing phosphorothioate oligonucleotide administered to a mammal, comprising:

- (a) providing a CpG-containing phosphorothioate oligonucleotide having a CpG modification selected from the group consisting of alkylphosphonate CpG, inverted CpG, 2'-O-substituted CpG, stereospecific phosphorothioate CpG, phosphoramidate CpG, and 2'-5' CpG; and
- (b) administering the modified CpG-containing phosphorothioate oligonucleotide to the mammal, wherein administration of the modified CpG-containing phosphorothioate oligonucleotide results in fewer side effects than the administration of an unmodified CpG-containing phosphorothioate oligonucleotide.
- 6. (**new**) The method of claim 3, wherein the oligonucleotide is complementary to a viral gene.
- 7. (new) The method of claim 6, wherein the viral gene is from a virus selected from the group consisting of human immunodeficiency virus, influenza virus, herpes simplex virus, Epstein-Barr virus, cytomegalovirus, respiratory syncytial virus, influenza virus, hepatitis B virus, hepatitis C virus and papilloma virus.
- 8. (**new**) The method of claim 3, wherein the oligonucleotide is complementary to a prokaryotic or a eukaryotic pathogen gene.
- 9. (new) The method of claim 8, wherein the prokaryotic or eukaryotic pathogen is selected from the group consisting of *Plasmodium falciparum*, *Plasmodium malarie*, *Plasmodium ovale*, *Schistosoma spp.*, and *Mycobacterium tuberculosis*.
- 10. (new) The method of claim 3, wherein the oligonucleotide is complementary to a host cellular gene.
- 11. (new) The method of claim 10, wherein the host cellular gene is inappropriately expressed such that disease results.
- 12. (new) The method of claim 10, wherein the host cellular gene is selected from the group consisting of vascular endothelial growth factor, beta amyloid, DNA

Appl. No. 09/103,745	Atty. Docket No. 47508.642 US2
Amdt. Dated: November 3, 2004	Client Ref. No. HYZ-642 US2
Reply to Advisory Action of July 1, 2004	

methyltransferase, protein kinase A, ApoE4 protein, p-glycoprotein, c-MYC protein, BCL-2 protein and CAPL.

- 13. (**new**) The method of claim 4, wherein the oligonucleotide is complementary to a host cellular gene.
- 14. (new) The method of claim 13, wherein the host cellular gene is inappropriately expressed such that disease results.
- 15. (new) The method of claim 13, wherein the host cellular gene is selected from the group consisting of vascular endothelial growth factor, beta amyloid, DNA methyltransferase, protein kinase A, ApoE4 protein, p-glycoprotein, c-MYC protein, BCL-2 protein and CAPL.